

**Disposition of Radioactivity 72 Hours Following Dermal Application  
of 0.4 mg/kg [<sup>14</sup>C]DTBBA to Male B6C3 F1/N Mice (Group F)<sup>a</sup>**

Dose Recovered in Excreta (%)

End of Collection Period (h)	Urine CPDE <sup>b</sup>	Cage Rinse CPDE	Feces CPDE	Volatile Organics CPDE	CO <sub>2</sub> CPDE	GI Content	Total CPDE
4	0.00622 ± 0.00326	0.916 ± 1.58	-	0.260 ± 0.022	2.06 ± 0.38	-	3.25
8	0.521 ± 0.675	3.70 ± 1.91	-	0.519 ± 0.090	4.10 ± 0.69	-	8.84
12	0.819 ± 0.902	6.62 ± 3.16	-	0.819 ± 0.1037	11.3 ± 11.0	-	19.6
24	1.36 ± 0.87	8.37 ± 3.41	7.99 ± 0.90	1.15 ± 0.14	13.5 ± 11.1	-	32.4
48	1.46 ± 0.92	9.24 ± 3.58	12.6 ± 3.0	1.32 ± 0.14	15.5 ± 11.2	-	40.1
72 <sup>c</sup>	1.61 ± 1.03	10.6 ± 3.7	14.4 ± 3.2	1.54 ± 0.15	18.0 ± 11.6	0.324 ± 0.122	48.3

Disposition in Tissues

Tissue	nmol-eq/g Mean	nmol-eq/g SD	TBR <sup>e</sup> Mean	TBR SD	Percent Recovery Mean	Percent Recovery SD
Blood <sup>d</sup>	0.0171	0.0096	unity	-	0.0955	0.0555
Adipose <sup>d</sup>	0.0113	0.0045	0.865	0.572	0.0885	0.0347
Muscle <sup>d</sup>	0.0135	0.0071	0.976	0.650	0.590	0.326
Skin <sup>d</sup>	0.0312	0.0207	2.41	2.11	0.588	0.408
Brain	0.00551	0.00306	0.413	0.341	0.00973	0.00521
Heart	0.00761	0.00321	0.557	0.371	0.00326	0.00104
Kidneys	0.00753	0.00174	0.548	0.280	0.0106	0.00307
Liver	0.0153	0.0137	1.19	1.27	0.0885	0.0866
Lung	0.00589	0.00220	0.425	0.275	0.00316	0.00107
Spleen	0.00819	0.00456	0.578	0.438	0.00142	0.00075
Adrenals	0.0697	0.0129	5.12	2.42	0.00172	0.00048
Thymus	0.0171	0.0074	1.21	0.63	0.00154	0.00093
Thyroid	0.0604	0.0435	4.84	4.51	0.00095	0.00036
Urinary Bladder	0.149	0.142	12.5	13.8	0.00569	0.00484
Pancreas	0.00855	0.00088	0.610	0.262	0.00422	0.00102
Testes	0.00956	0.00546	0.750	0.612	0.00581	0.00190
Cecum	0.0406	0.0317	3.03	2.01	0.00413	0.00369
Large Intestine	0.0222	0.0107	1.36	0.33	0.0120	0.0080
Small Intestine	0.0165	0.0079	1.05	0.40	0.0305	0.0139
Stomach	0.0242	0.0289	1.89	2.74	0.00888	0.01184

Disposition Summary—Dose Recovered (%)

Sample	Percent Recovered Mean	Percent Recovered SD
<b>Total Unabsorbed Dose</b>	<b>33.9</b>	<b>2.7</b>
Applicator	3.88	2.39
Tape / Glue	8.93	5.75
Dose Site Swipes	21.1	9.5
<b>Total Dose Site Skin</b>	<b>2.09</b>	<b>0.51</b>
<b>Total Absorbed Dose</b>	<b>49.8</b>	<b>8.7</b>
Urine + Cage Rinse	12.4	4.3
Urine	1.61	1.03
Cage Rinse	10.6	3.7
Feces	14.4	3.2
GI Content	0.324	0.122
Carcass	0.00	0.00
Tissues	1.55	0.68
<b>Total Recovered</b>	<b>85.9</b>	<b>9.1</b>

<sup>a</sup>All values expressed as mean ± standard deviation (SD) (N = 5). The target dose was 0.4 mg DTBBA/kg. The actual dose delivered was 0.43 ± 0.02 mg/kg (34.8 ± 1.4 µCi).

<sup>b</sup>CPDE = Cumulative percent dose excreted

<sup>c</sup>72 hour (h) urine collection included urine present in the urinary bladder at study termination.

<sup>d</sup>Tissue weights for the dispersed tissues were calculated using the following percentages of body weight: adipose 7.0%, blood 7.4%, muscle 40.4%, and skin 19% (International Life Sciences Institute, 1994). [sic]

<sup>e</sup>TBR = tissue to blood ratio